FIGURE 5

Dose related effect in terms of Dextran-FITC conjugate take-up at high concentrations

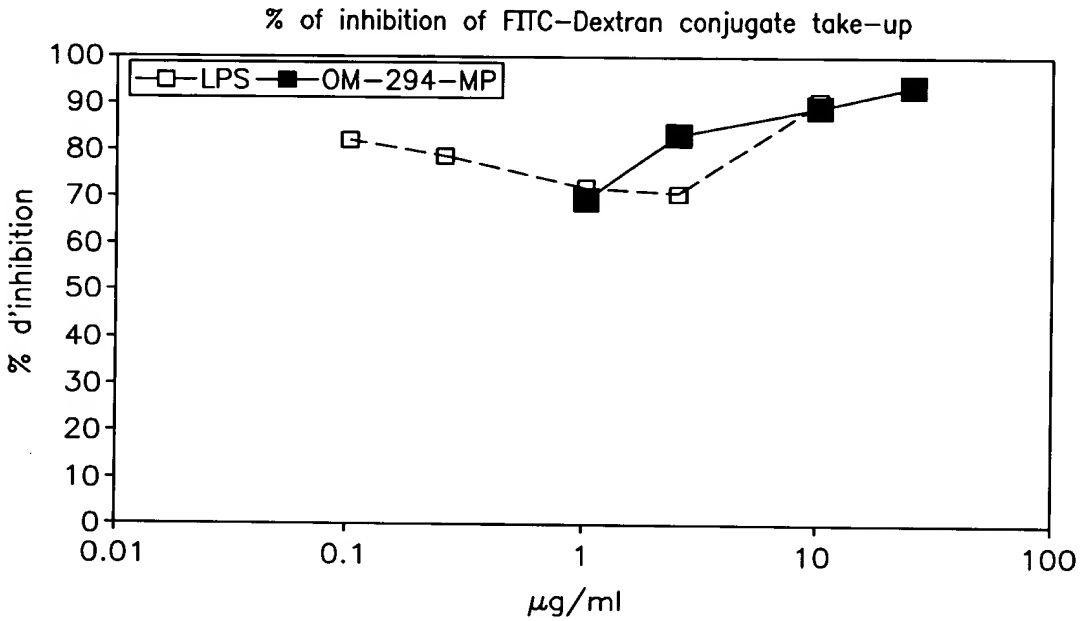


FIGURE 6

CD40 co-stimulating surface marker expression

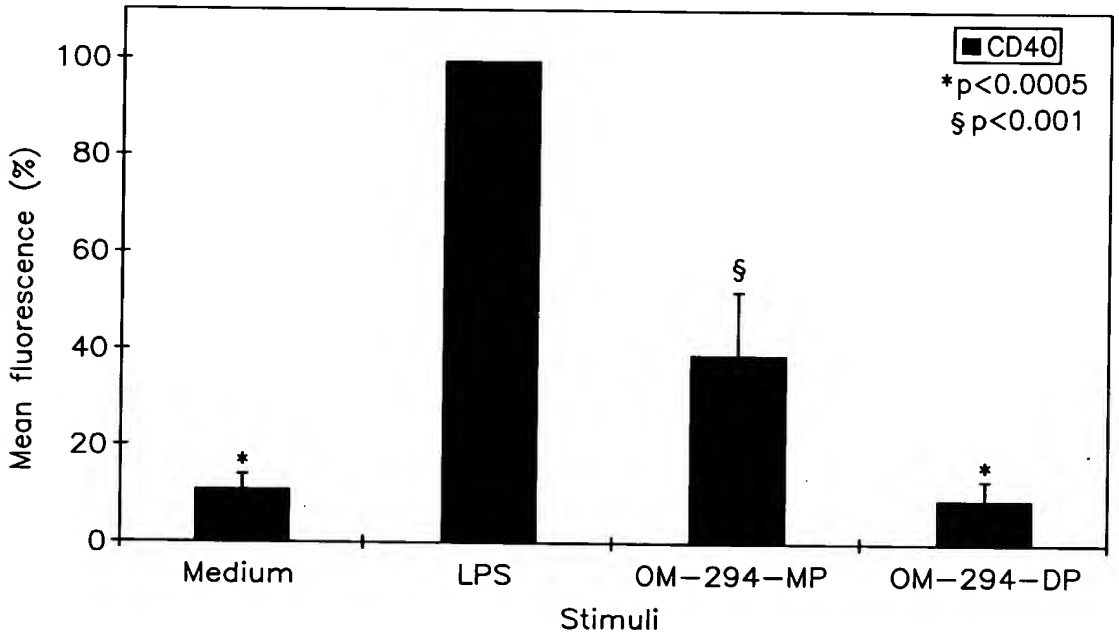


FIGURE 9

Expression of CD80 co-stimulating surface marker

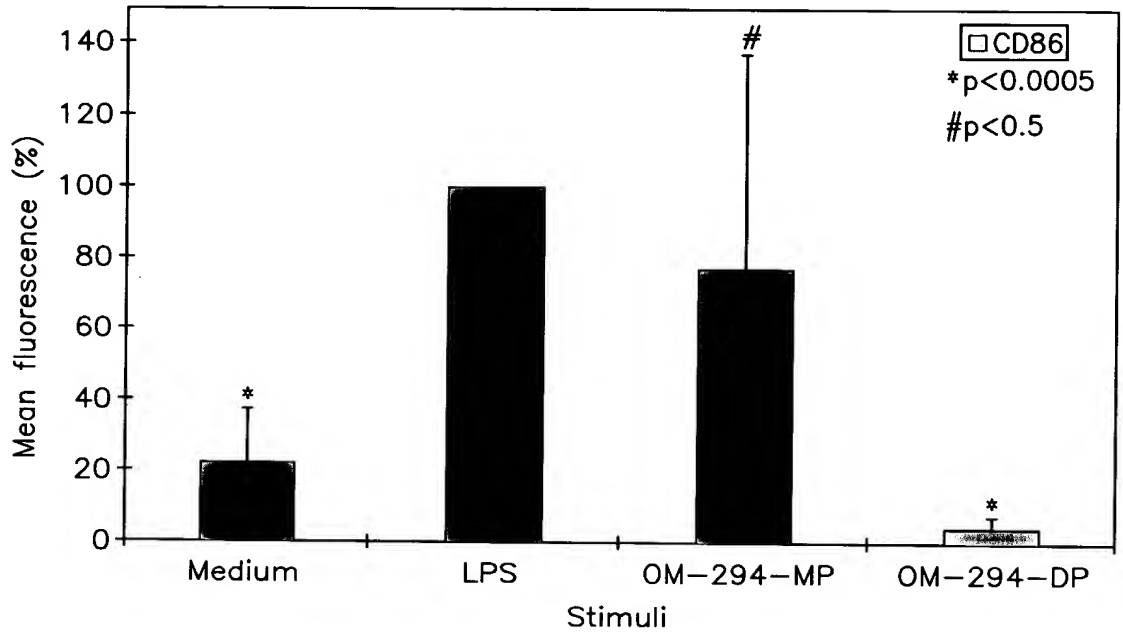


FIGURE 10

Effect of OM-294-MP and OM-294-DP products on αTNF production by predendritic cells at DC-6 stage

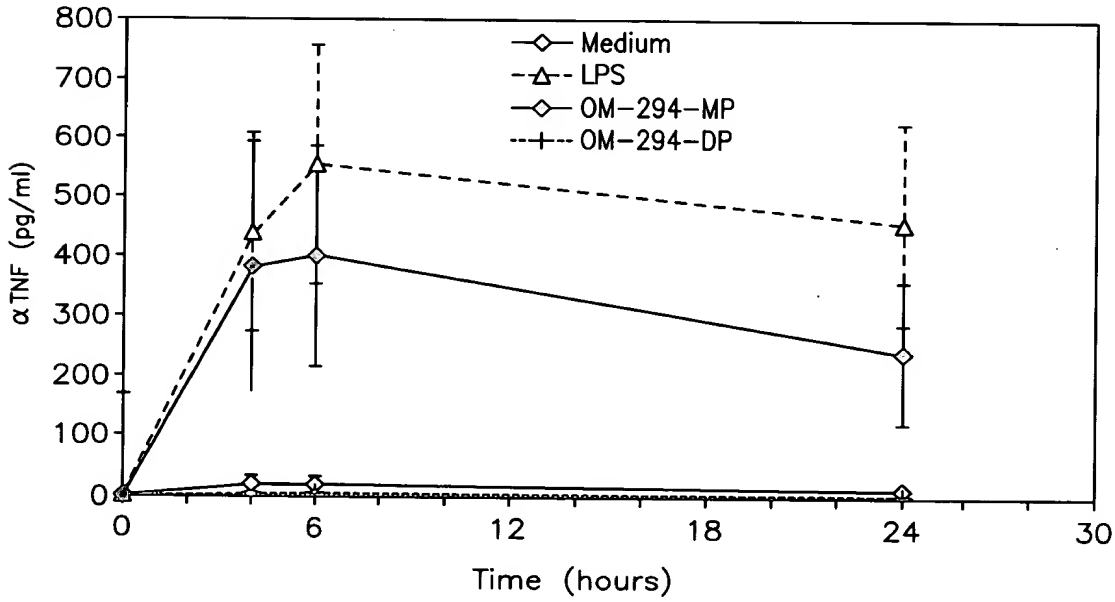


FIGURE 11

Effect of OM-294-MP and OM-294-DP products on IL-12 p70 production by predendritic cells at DC-6 stage (IFN = γ IFN)

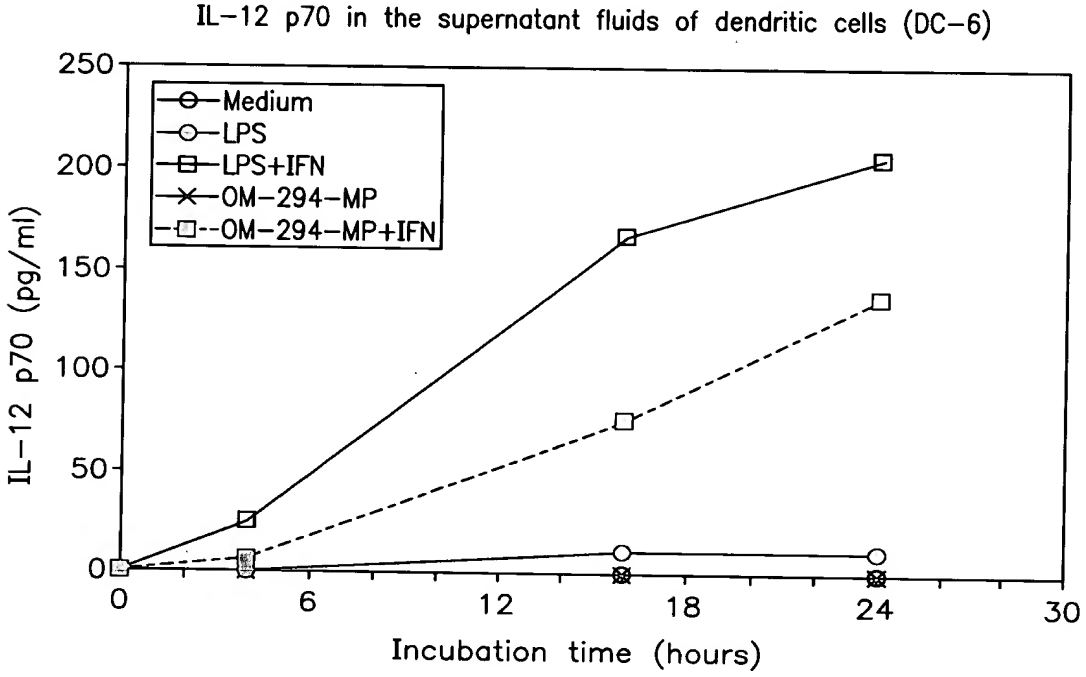


FIGURE 12

Effect of OM-294-MP products on IL-12 p70 production by monocytes (IFN = γ IFN)

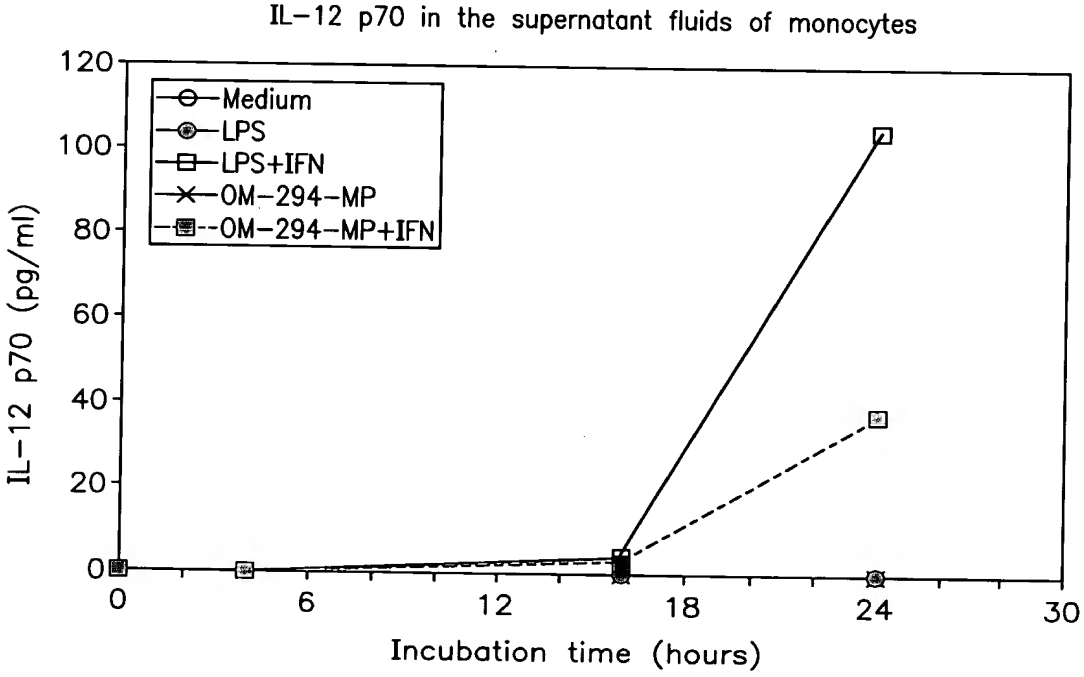


FIGURE 33

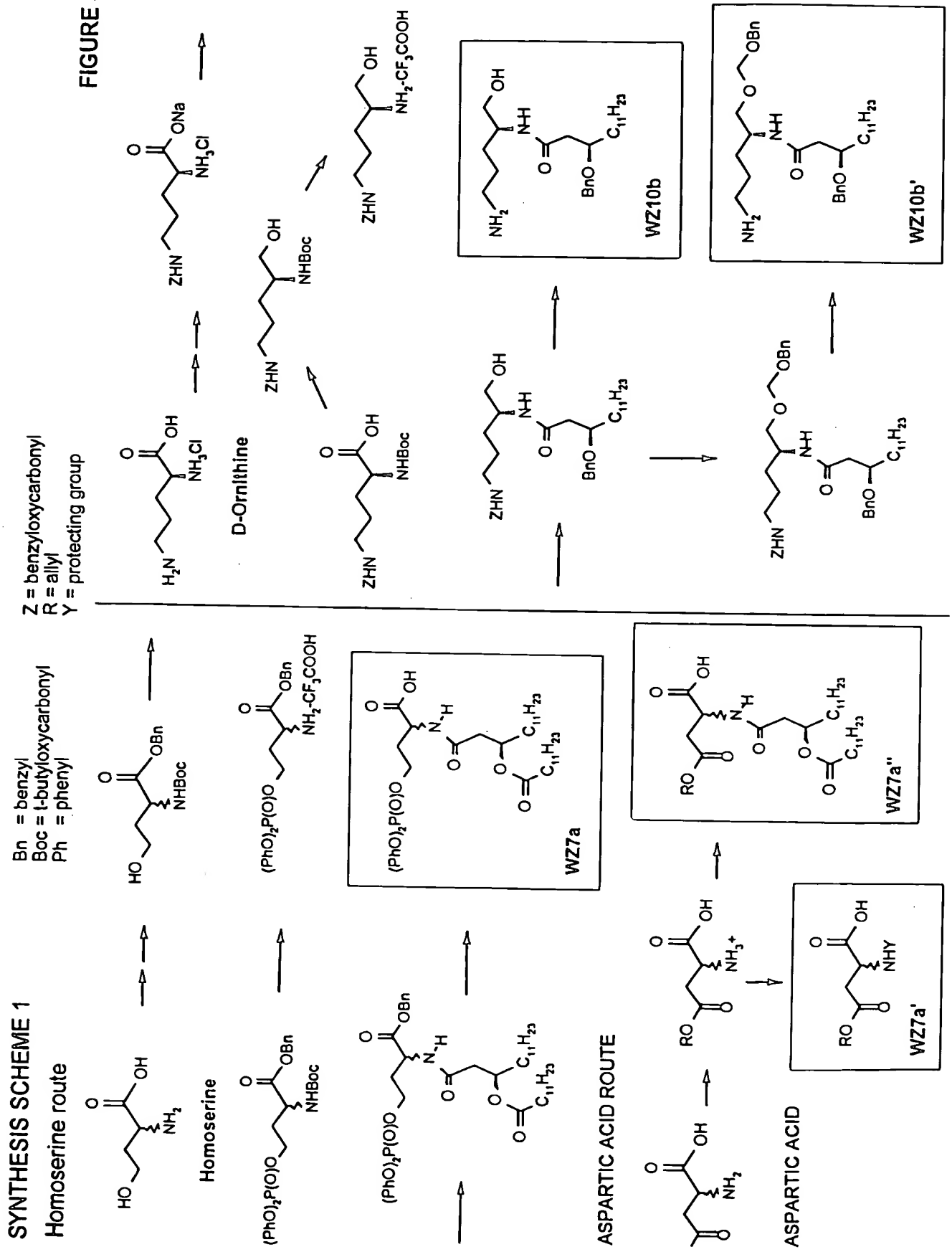

SYNTHESIS SCHEME 1
Homoserine route
Homoserine
ASPARTIC ACID ROUTE
ASPARTIC ACID
D-Ornithine
Bn = benzyl
Boc = t-butyloxycarbonyl
Ph = phenyl
Z = benzyloxycarbonyl
R = allyl
Y = protecting group
WZ7a
WZ7a'
WZ7a''
WZ10b
WZ10b'

FIGURE 34

SYNTHESIS SCHEME 2

Bn = benzyl
Ph = phényl

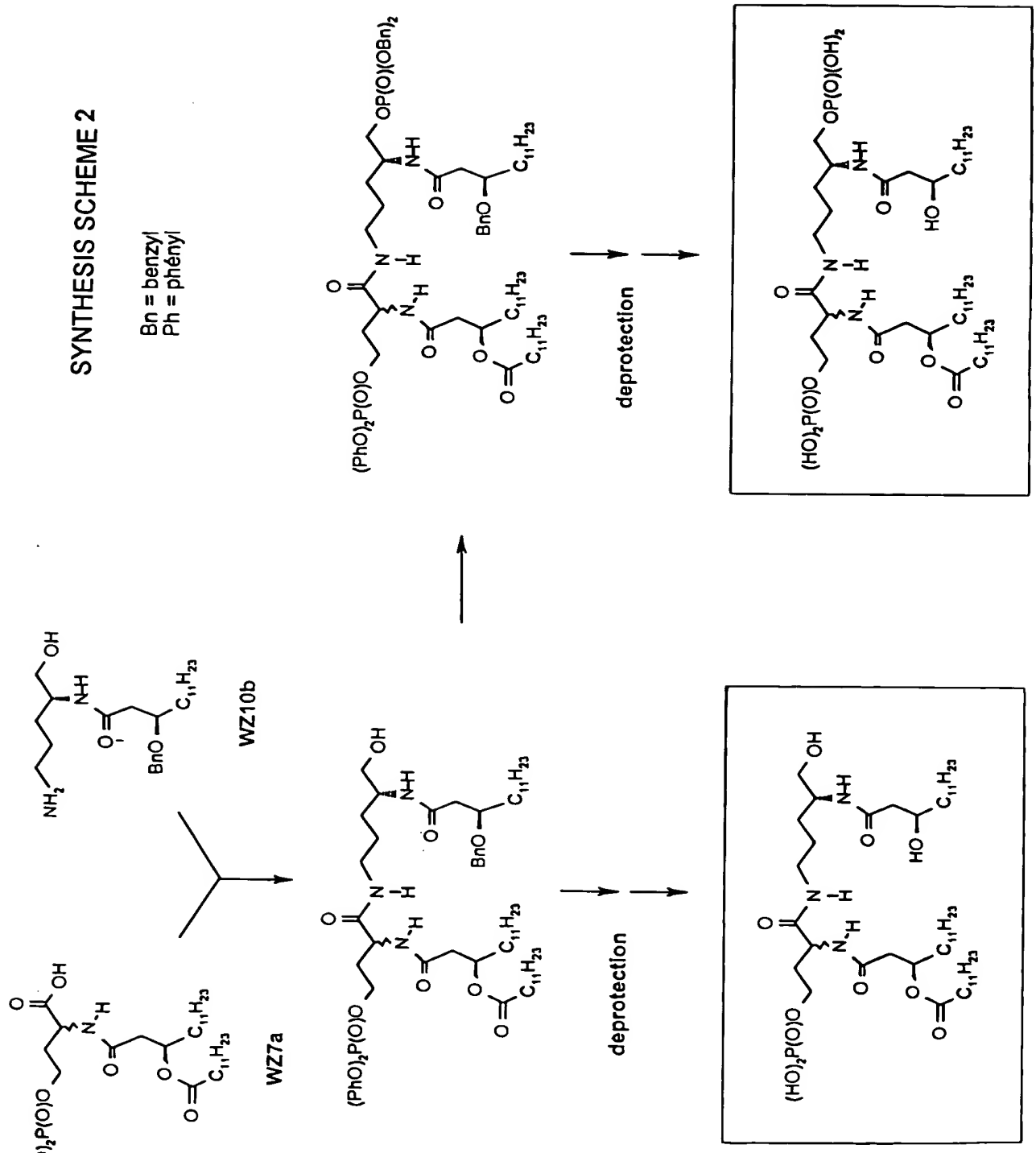


FIGURE 35

SYNTHESIS SCHEME 3

Bn = benzyl
Ph = phenyl

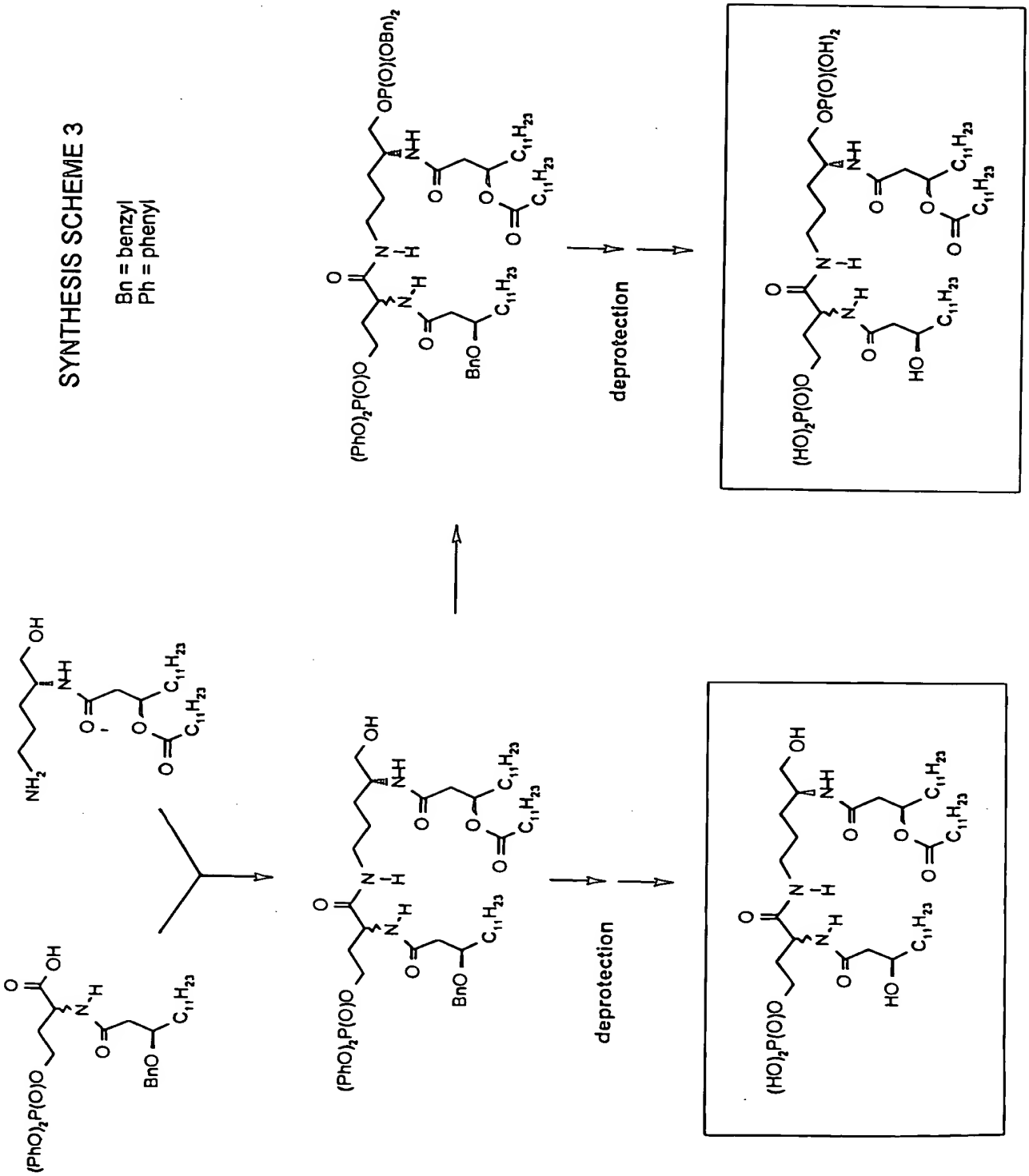


FIGURE 36

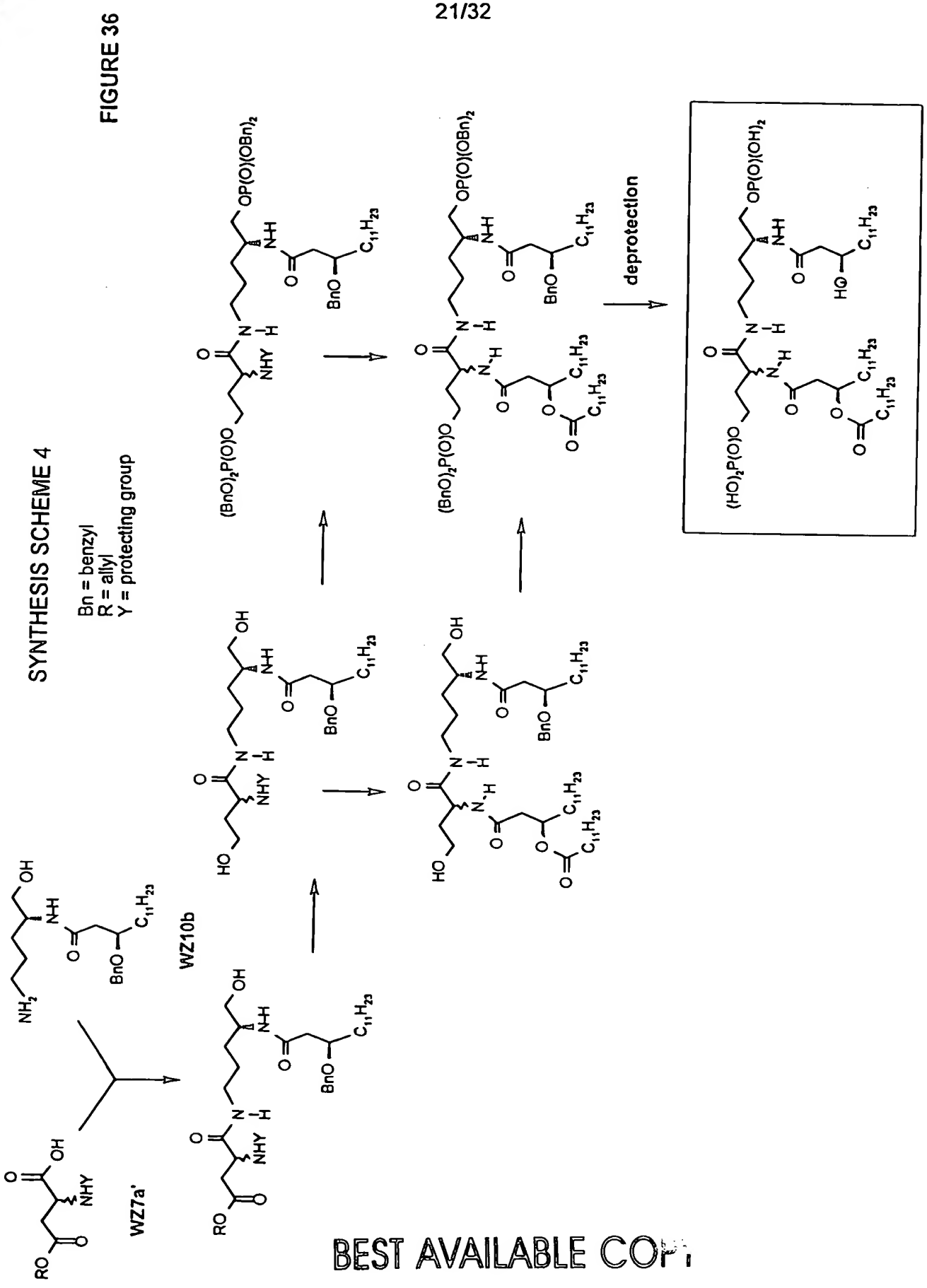


FIGURE 37

SYNTHESIS SCHEME 5

Bn = benzyl
R = allyl
Y = protecting group

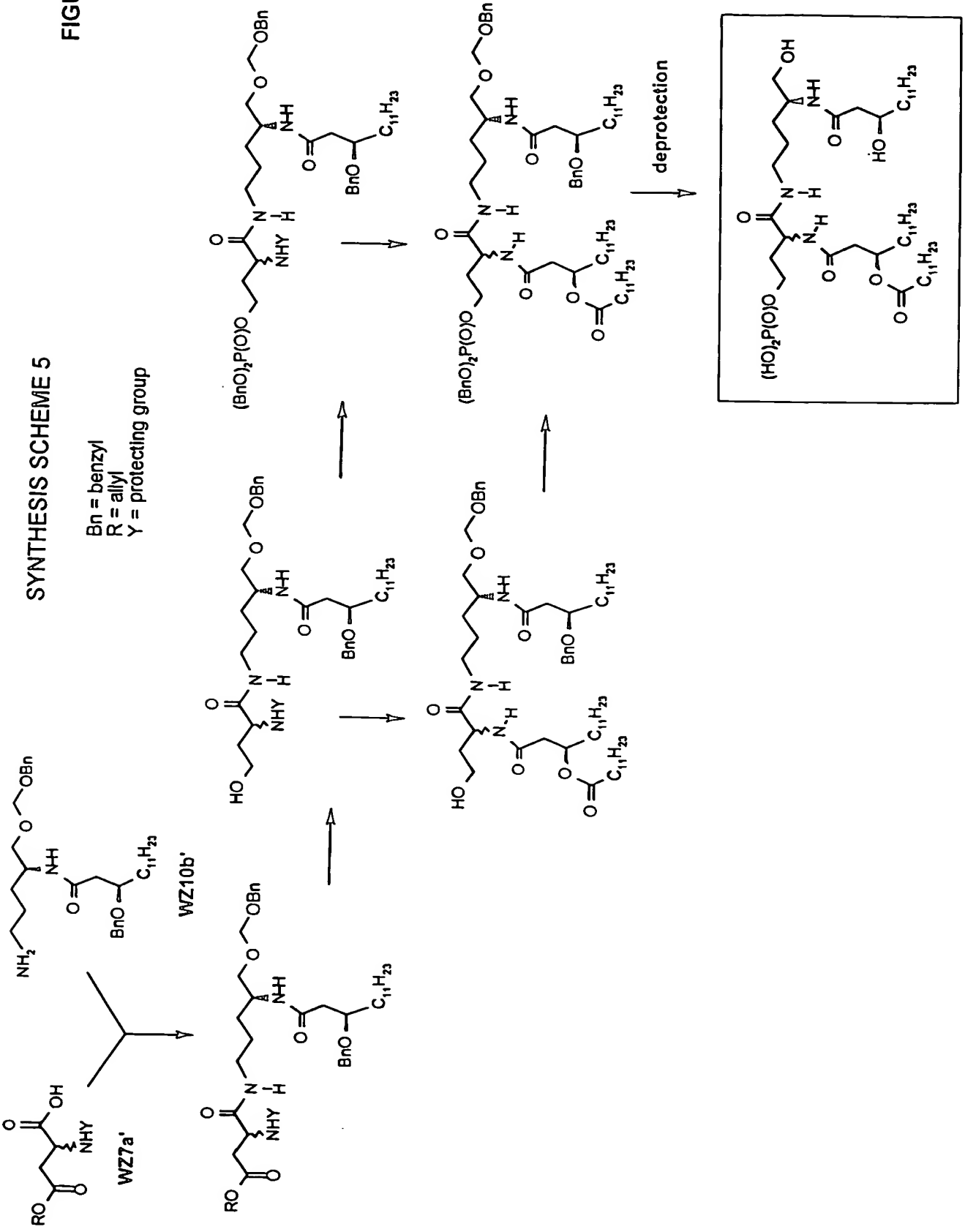


FIGURE 38

SYNTHESIS SCHEME 6

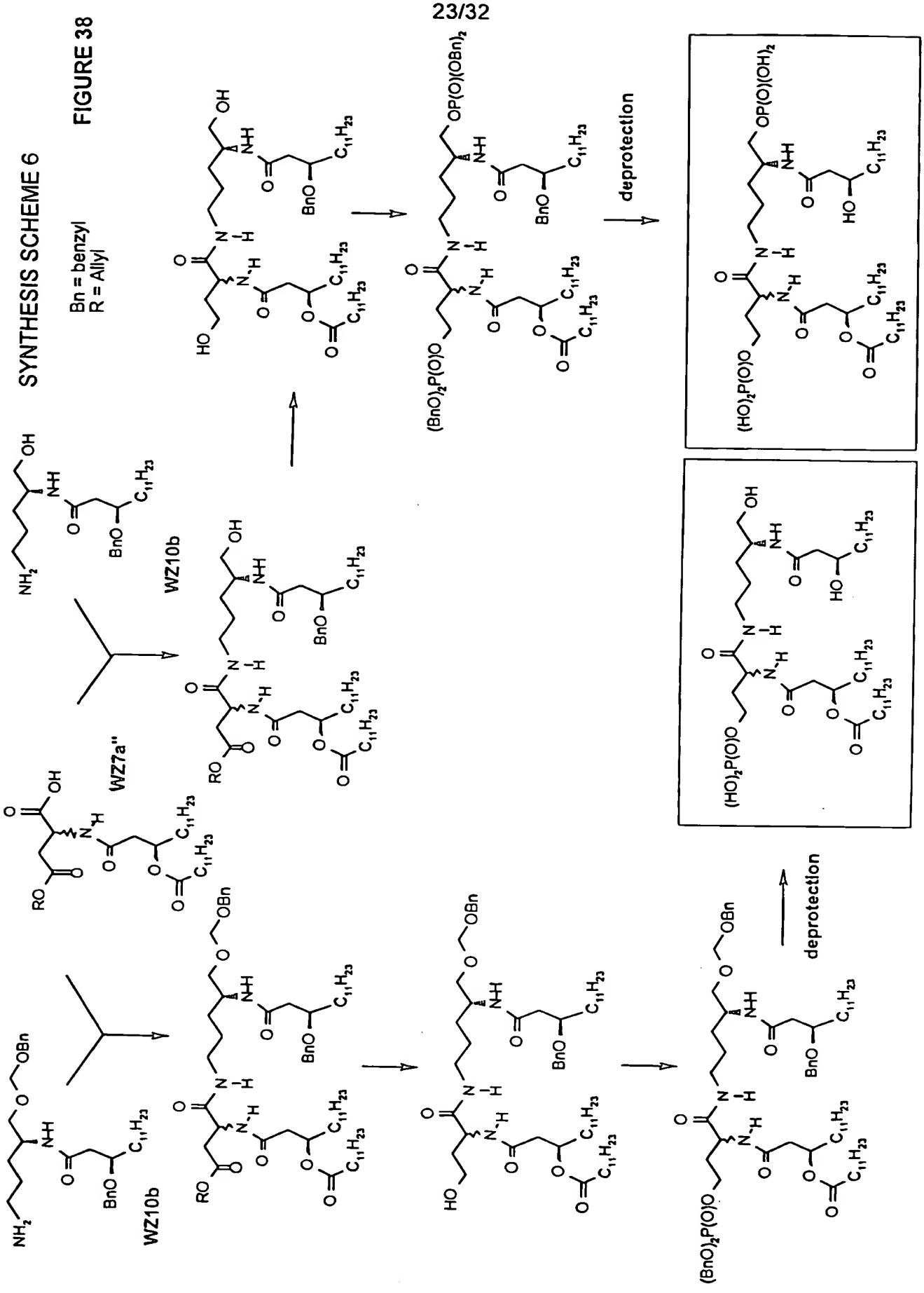
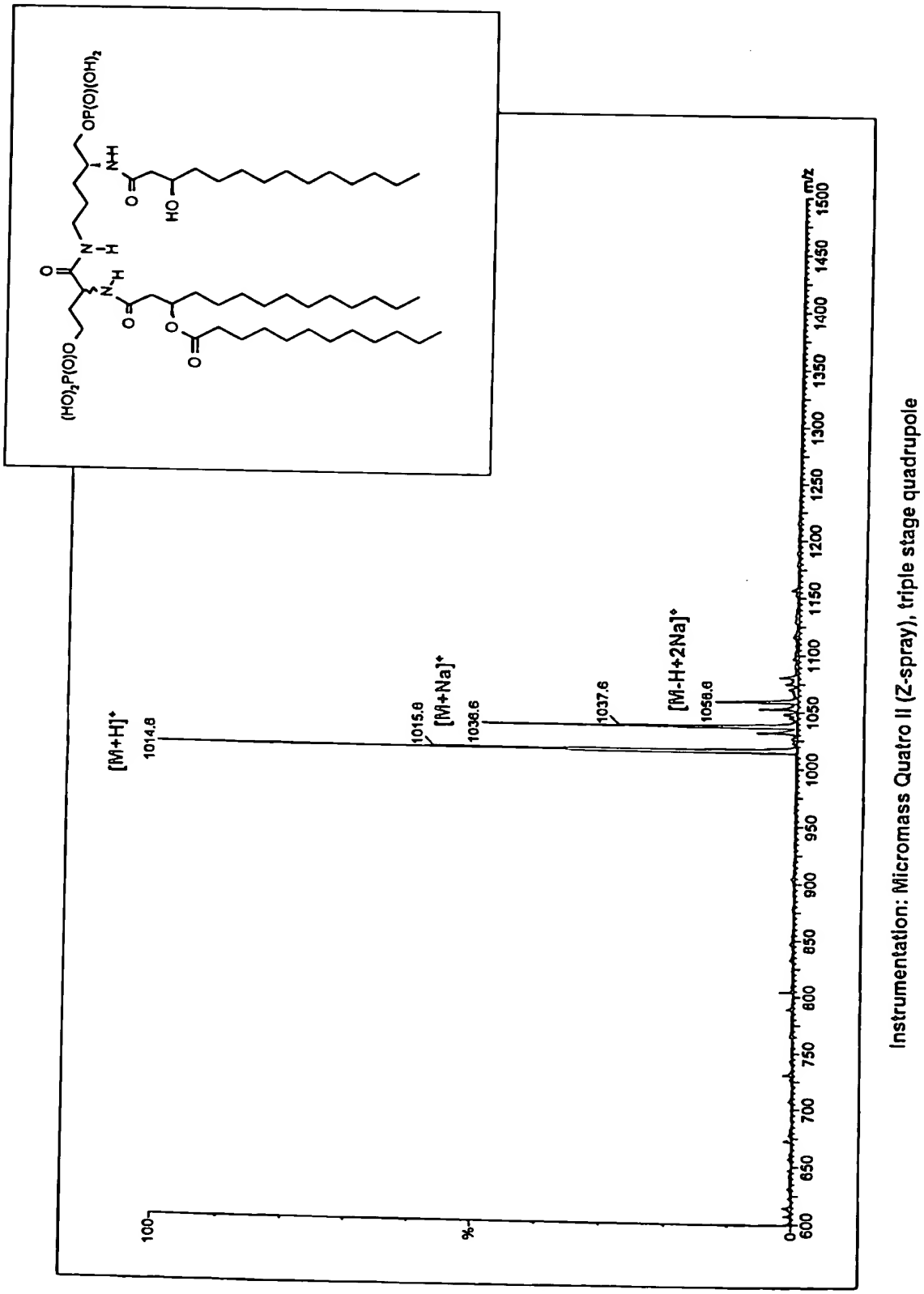


FIGURE 39

SPECTRUM 1

Diphosphorylated compound

ES-MS spectra (positive mode)



Instrumentation: Micromass Quatro II (Z-spray), triple stage quadrupole

FIGURE 40

SPECTRUM 2

monophosphorylated compound
ES-MS spectra (positive mode)

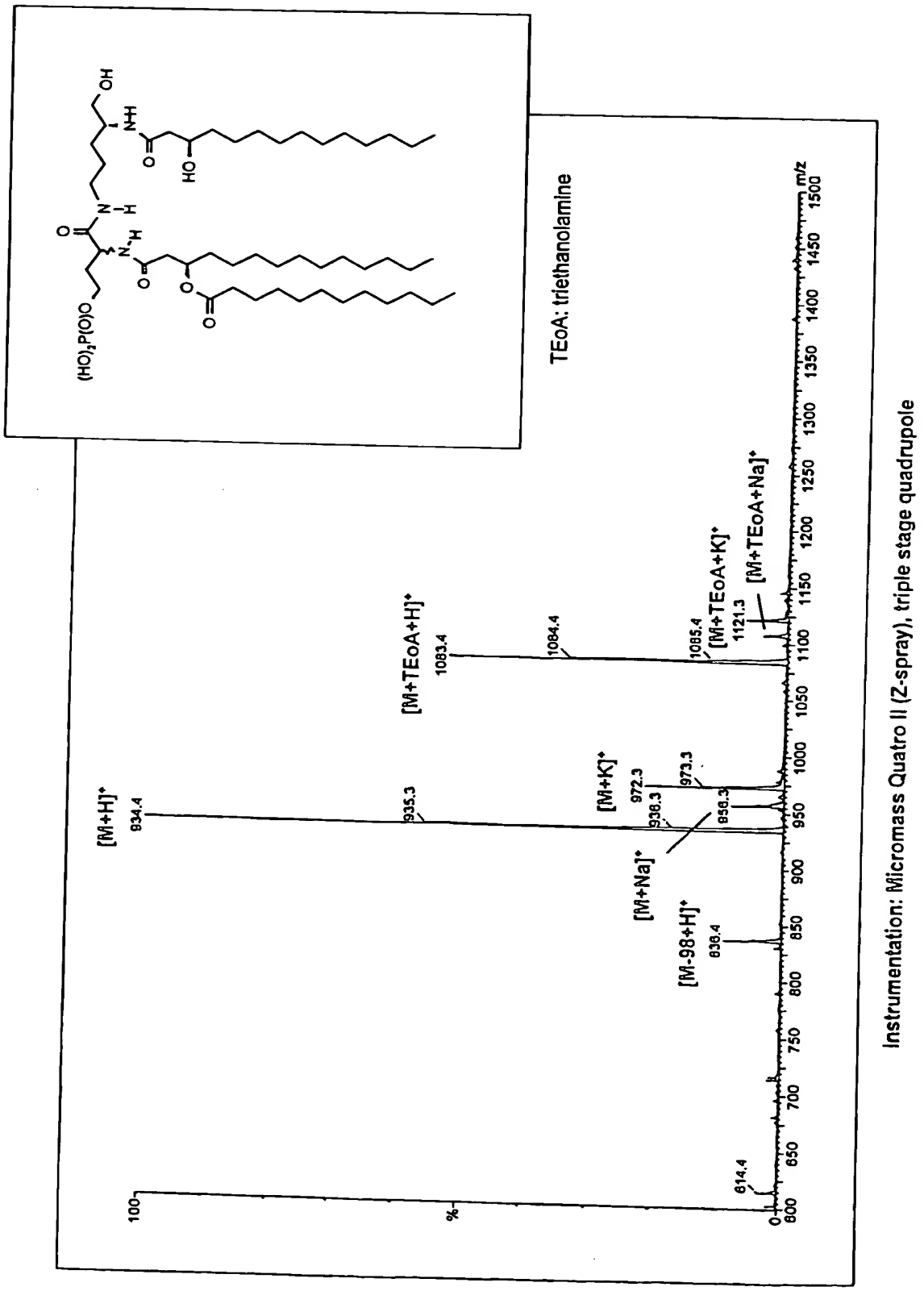
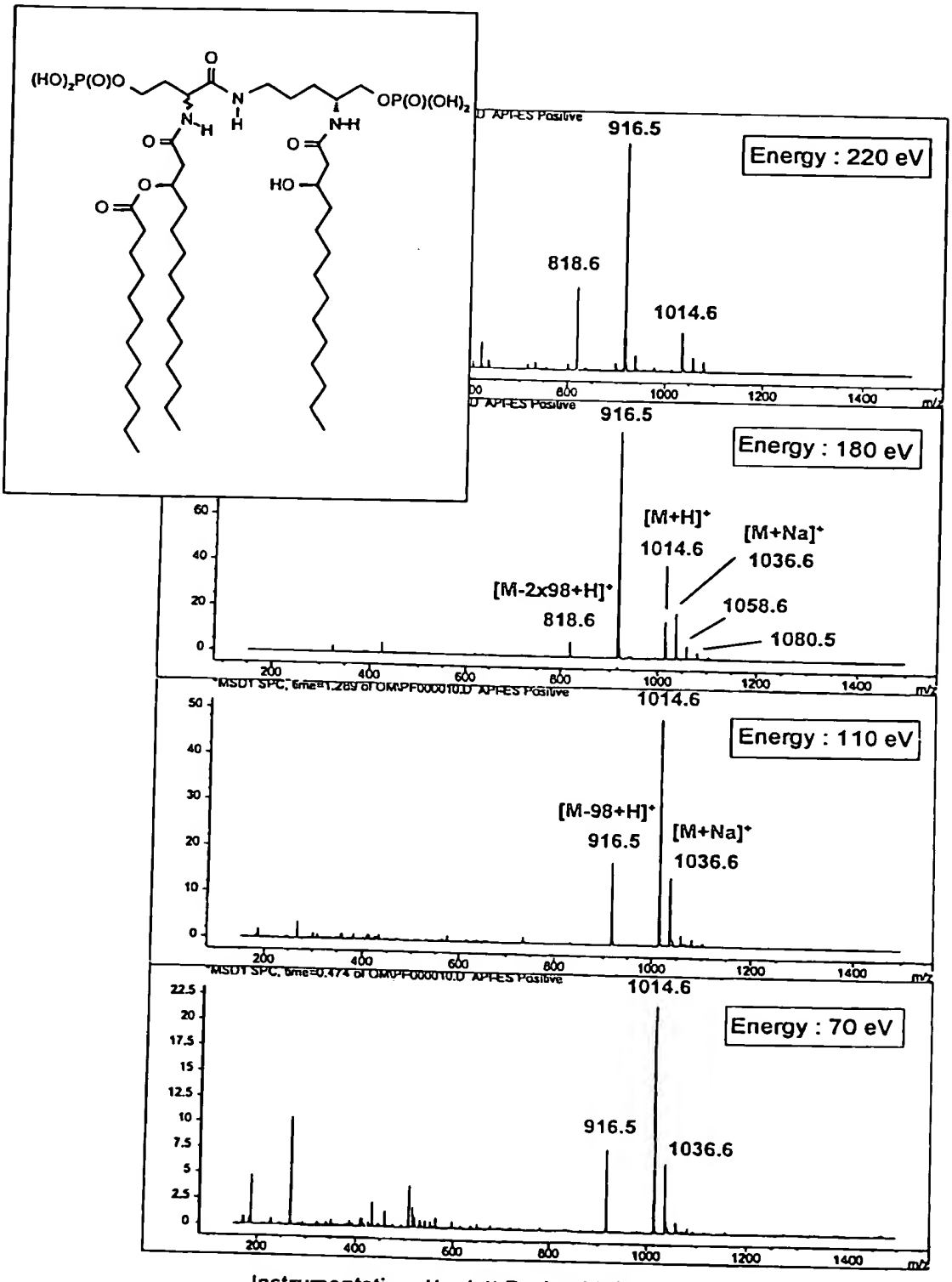


FIGURE 41

SPECTRUM 3

Diphosphorylated compound

ES-MS spectra (positive mode fragmentation)



Instrumentation: Hewlett-Packard MSD, single quadrupole

FIGURE 42

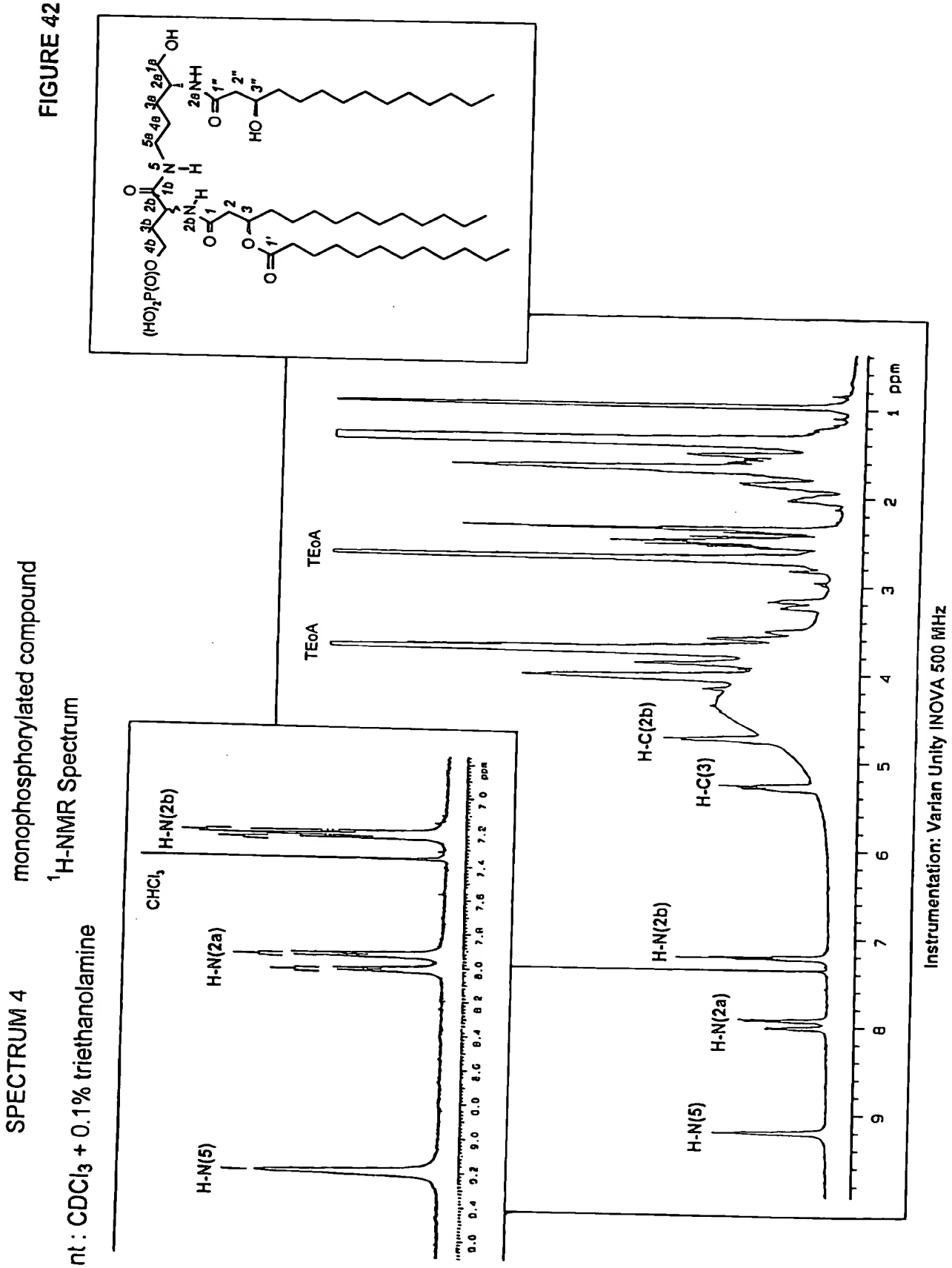
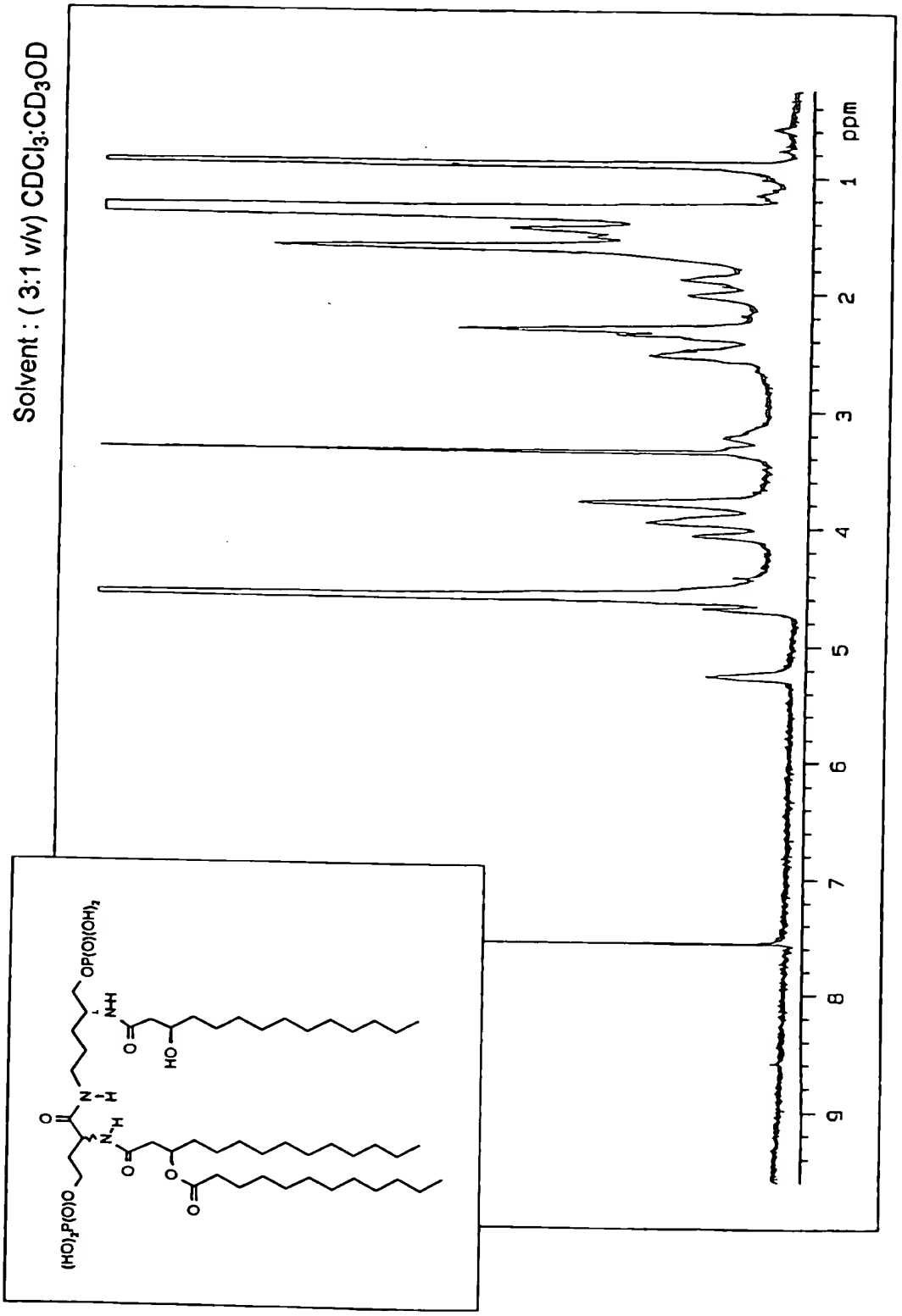

SPECTRUM 4
monophosphorylated compound
^{1}H-NMR Spectrum
nt : $CDCl_3$ + 0.1% triethanolamine
$(HO)_2P(O)O$
OH
HO
$CHCl_3$
H-N(2b)
H-N(2a)
H-N(5)
TEoA
TEoA
H-C(2b)
H-C(3)
H-N(2b)
H-N(2a)
H-N(5)
ppm
Instrumentation: Varian Unity INOVA 500 MHz

FIGURE 43

SPECTRUM 5 monophosphorylated compound

^{1}H-NMR Spectrum

Solvent : (3:1 v/v) $CDCl_3$:CD_3OD



Instrumentation: Varian Unity INOVA 500 MHz

FIGURE 44

SPECTRUM 6

monophosphorylated compound

^{13}C-NMR Spectrum

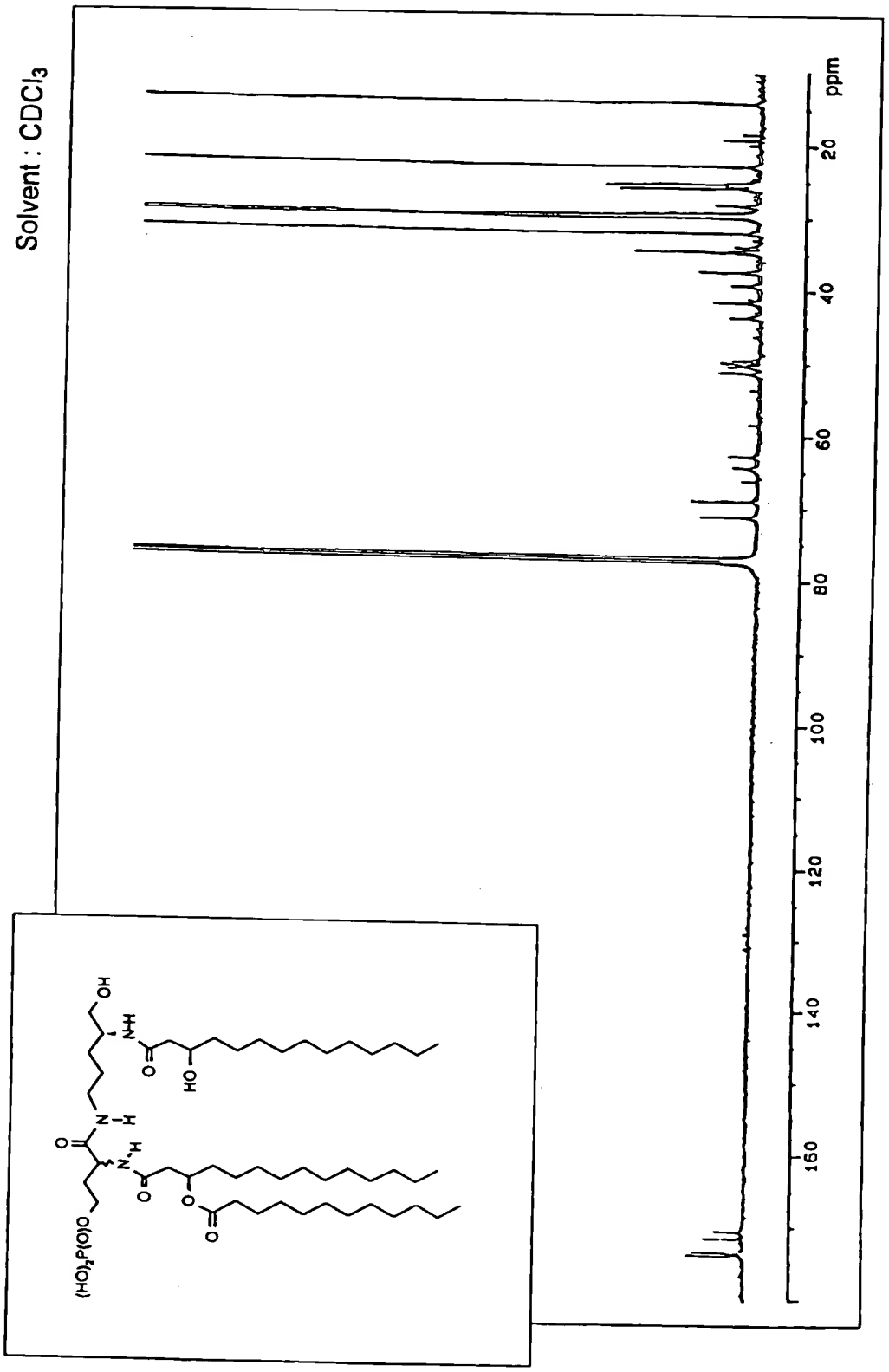
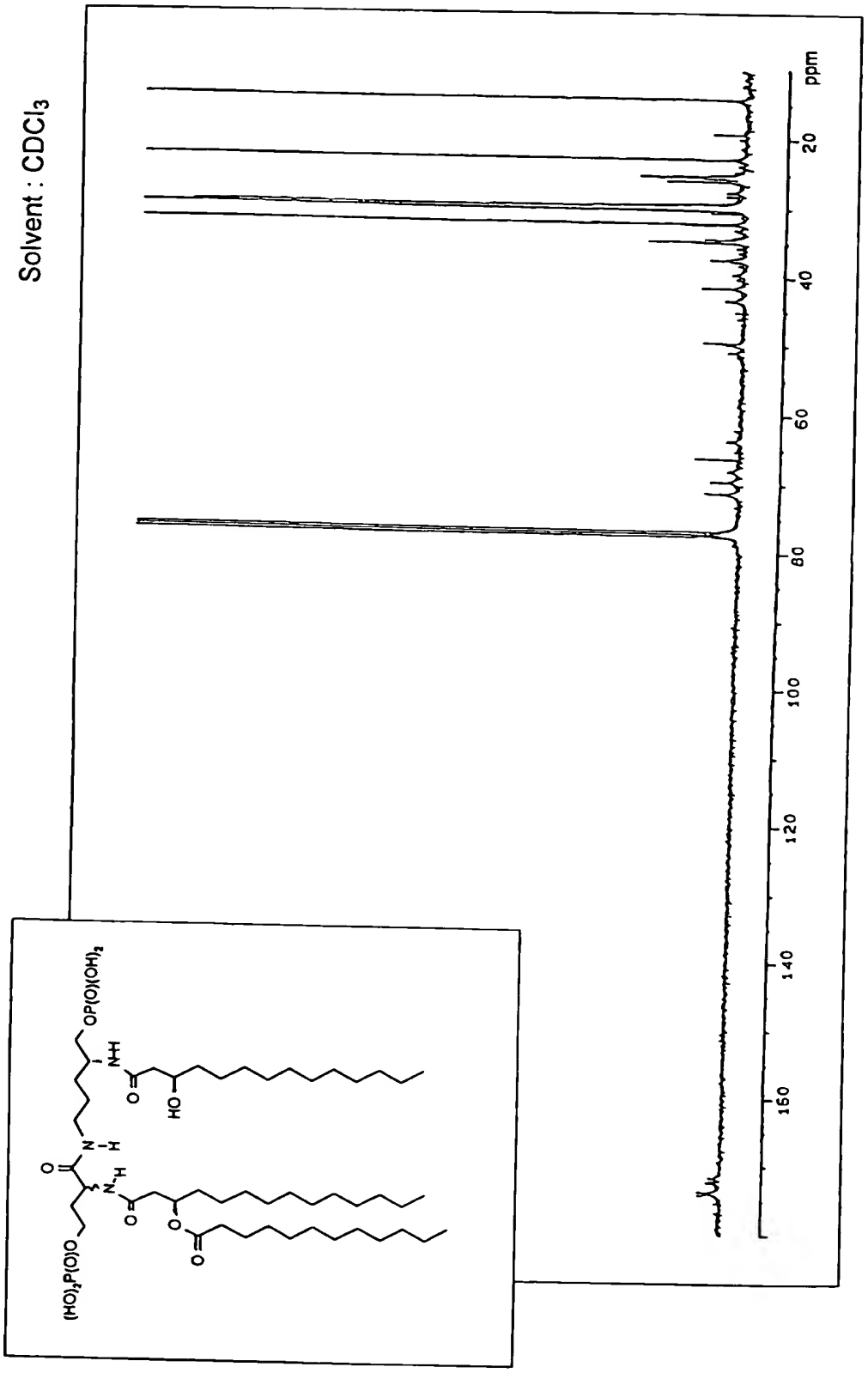


FIGURE 45

Spectrum 7

Diphosphorylated compound

^{13}C-NMR Spectrum



Instrumentation: Bruker DPX 250 MHz

FIGURE 46

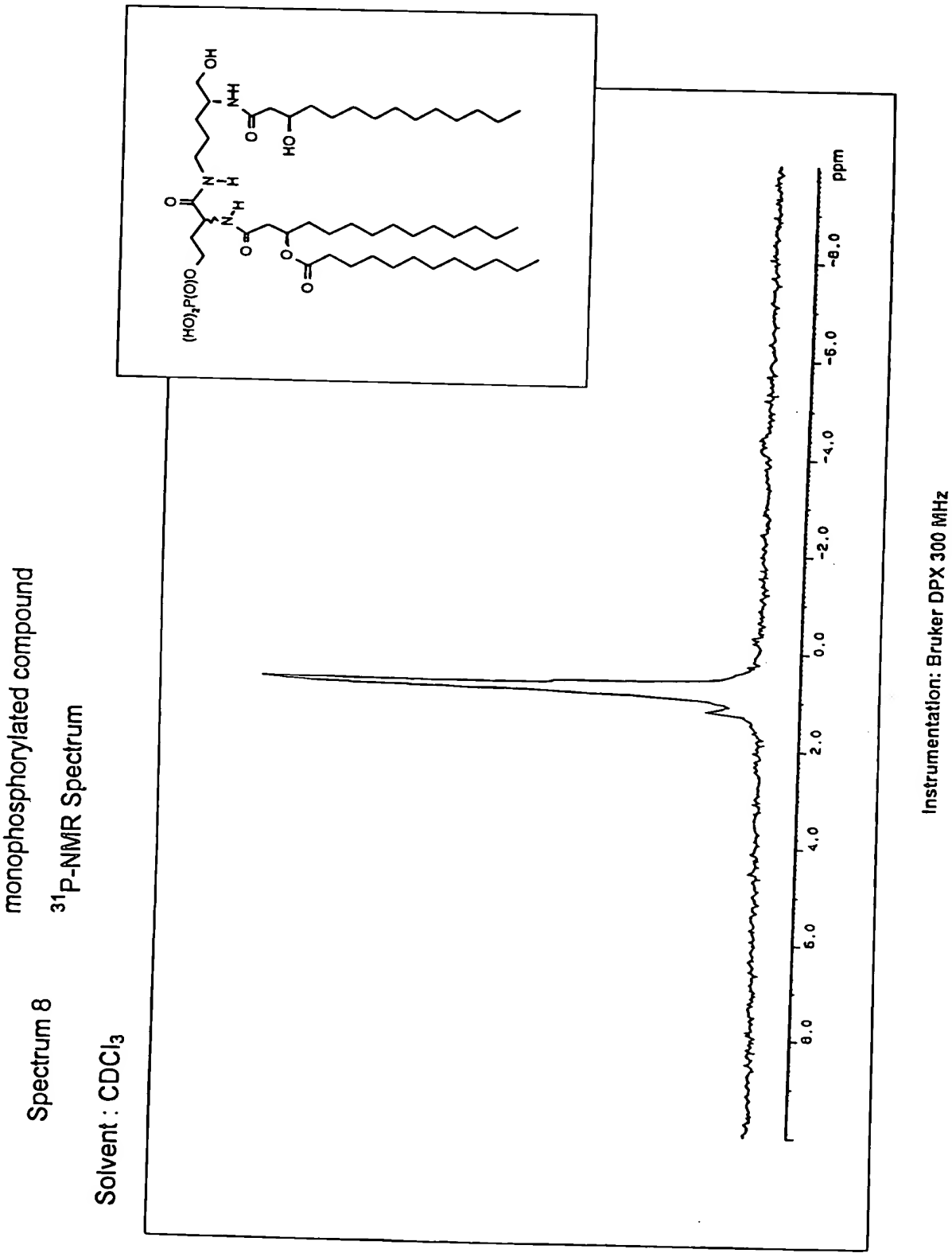
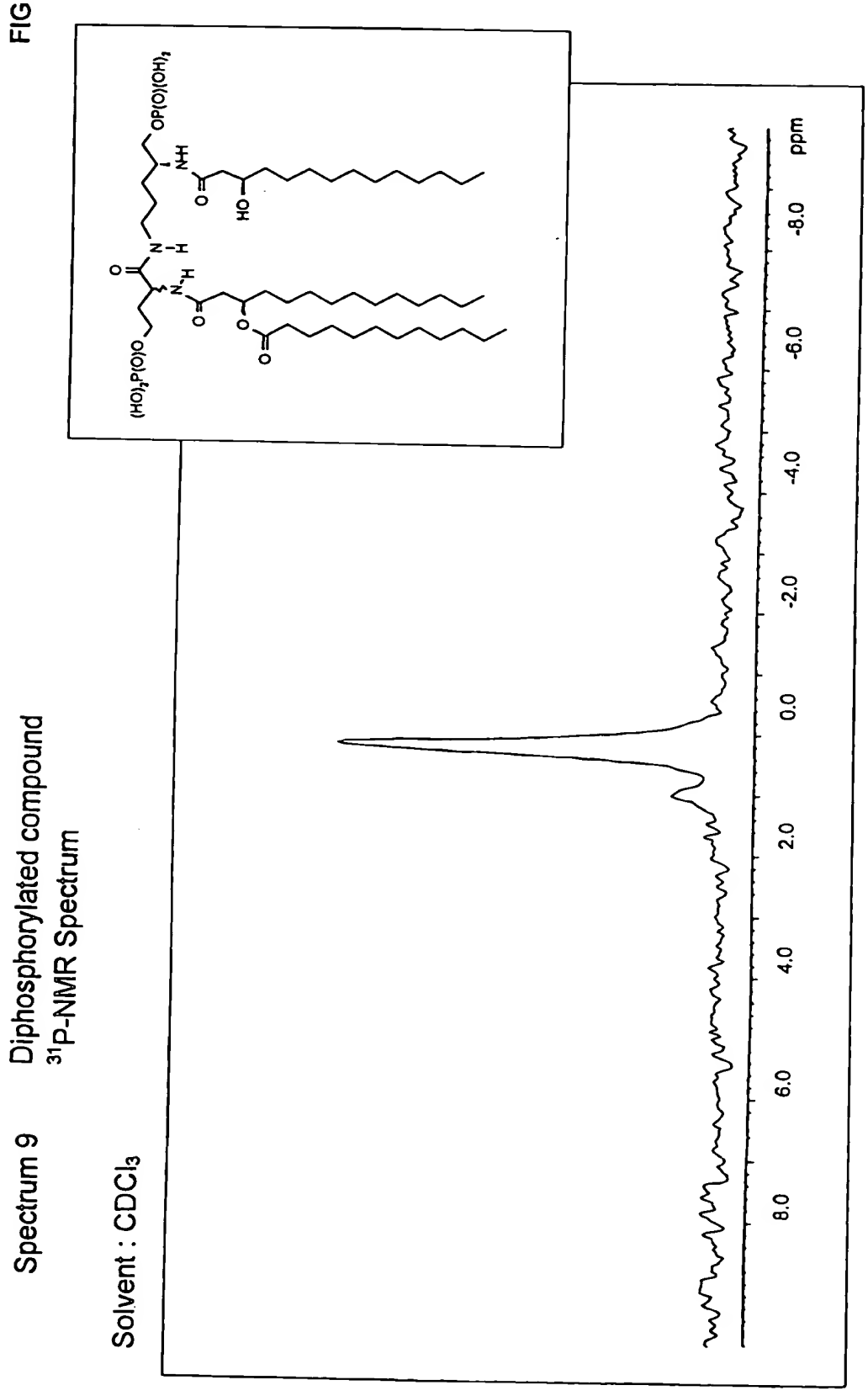

monophosphorylated compound
^{31}P-NMR Spectrum
Spectrum 8
Solvent : $CDCl_3$
ppm
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
Instrumentation: Bruker DPX 300 MHz

FIGURE 47


Spectrum 9
Diphosphorylated compound
^{31}P-NMR Spectrum
Solvent : $CDCl_3$
$(HO)_2P(O)O$
$OP(O)(OH)_2$
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
ppm
Instrumentation: Bruker DPX 300 MHz